

**IN THE CLAIMS:**

Please cancel claim 10 without prejudice and amend the claims as follows:

7. (Currently Amended) A functional system, comprising:

a collective resource;  
a plurality of functional units requiring access to said collective resource; and  
an interface in electrical communication with said collective resource and said functional units to implement a scheme for managing access to said collective resource by said functional units,  
wherein said interface implements a plurality of states in a predetermined manner,

and

wherein each at least one state includes a period of access and a pre-defined order of priority for facilitating enabling access to said collective resource by one of said functional units among at least two of said functional units.

8. (Currently Amended) A data processing system, comprising:

a collective memory;  
a plurality of processors requiring access to said collective memory; and  
an interface in electrical communication with said collective memory and said processors to implement a scheme for managing access to said collective memory by said processors,  
wherein said interface implements a plurality of states in a predetermined manner,  
and

wherein at least one~~each~~ state includes period of access and a pre-defined order of priority for facilitating access to said collective memory by one~~of~~said processors~~among~~ at least two~~of~~said processors.

9. (Currently Amended) A computer readable medium storing a computer program product for managing access to a collective memory by a plurality of functional units, said computer readable medium, comprising:

computer readable code for implementing a plurality of states in a predetermined manner, and

for at least one~~each~~ state, computer readable code for providing a period of access and pre-defining an order of priority for facilitating access to said collective resource by one~~of~~said functional units~~among~~ at least two~~of~~said functional units.

10. (Canceled).